

*Algebra II Direct and Inverse Variation Worksheet # 3*

1. The cost per person to rent a mountain cabin is inversely proportional to the number of people who share the rent. If the cost is \$36 per person when 5 people share, what is the cost per person when 8 people share?



2. The amount of money earned on a job is directly proportional to the number of hours worked. If \$36 is earned for 8 hours of work, how much is earned for 30 hours of work?



3. The number of calories in a container of milk is directly proportional to the amount of milk in the container. If there are 160 calories in an 8-ounce glass of milk, find the number of calories in a 15-ounce glass of milk.



4. For rectangles with the same area, the length varies inversely as the width. One rectangle has a length of 12 cm and a width of 5 cm. Find the length of another rectangle with the same area whose width is 4 cm.
5. The current electrical circuit varies inversely as the amount of resistance in the circuit. The current is 10 amps when the resistance is 24 ohms. Find the current when the resistance is 30 ohms.

6. On certain map, map, what is the actual



25 km are represented by 2 cm. If two cities are 7 cm apart on the distance between them?